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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,197	09/15/2006	Nigel Anstey	648/44539	3875
23646 7590 11/19/2009 BARNES & THORNBURG LLP 750-17TH STREET NW SUITE 900 WASHINGTON, DC 20006-4675				
EXAMINER				
SCHWARTZ, CHRISTOPHER P				
ART UNIT		PAPER NUMBER		
3657				
MAIL DATE		DELIVERY MODE		
11/19/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/561,197

**Applicant(s)**

ANSTEY ET AL.

**Examiner**

Christopher P. Schwartz

**Art Unit**

3657

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 6, 2009 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7,9,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aurich et al. '301 in view of Mayer et al. '611 and the U.S. Publication to Balch et al. '049.

Regarding claims 1- Aurich et al. shows a train brake system similar to applicant's as broadly claimed. Please see the discussion in col. 4 lines 1-10, lines 2—25, and col. 13 lines 9-14 and lines 24-33.

Lacking in Aurich et al. is a specific statement that the speed sensors are applied to the axles of the train cars/bogies and that the sampling time for the speed sensors is greater than 10ms.

The reference to Mayer et al. teaches this well known idea in col. 2 lines 50-56. Note also that Mayer et al. uses "at least two independent channels for determining the references speeds". See the abstract. Although not applied see the statement in Wood et al. '953 col. 15 lines 21-22.

The reference to Balch et al. '049 teaches in paragraph 0020 that the sampling times for the axle speed sensors can be around 20ms. See figure 4. It is well known that the choice of sampling times may be varied as the application warrants.

One having ordinary skill in the art would have found it to be an obvious alternative equivalent to have provided each axle of Aurich et al. with axle speed sensors with sampling times greater than 10ms to determine the speed of the vehicle.

Regarding claims 2-7, as broadly claimed (and as best understood), these requirements are met. Note that in regard to claims 6 and 7 that since Aurich et al. in view of Mayer et al. teach it is known to provide trains with anti-lock brake systems the brakes may be "forcibly released" by said anti-lock brake system during anti-lock control at which point the speed of the axles/vehicle may be determined.

Regarding claim 10 it is notoriously well known in the art that the pressures may be increased on adjacent bogies should one experience a pressure loss. Although not applied see Heilhecker et al. '450

4. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Aurich et al. '301 in view of Mayer et al. '611 and Balch et al. as applied to claim 1 above, and further in view of Hollandsworth et al. '061.

Regarding claim 8 it is notoriously well known in the art to provide train communication/databus systems with a certain amount of redundancy in case of unexpected failure of one of the communication systems.

The reference to Hollandsworth et al. is relied upon for a general (but well known) teaching of this idea. See the abstract. Although not applied see paragraph 0059 in Kane '961 and 0029 in Barberis et al.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-10 have been considered but are not persuasive. The reference to Aurich et al. teaches a pneumatic braking system for trains. The reference to Balch et al. '049 teaches in paragraph 0020 that the sampling times for the axle speed sensors can be around 20ms. This would seem to indicate that the choice of sampling times (i.e. sensors) may be varied as the application warrants. Applicants admit in their specification that 10ms sensors are well known.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Schwartz whose telephone number is 571-272-7123. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rob Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher P. Schwartz/  
Primary Examiner, Art Unit 3657

11/18/09